

REMARKS

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Claims have been amended to clarify the subject matter regarded as the claimed invention. New claims 21-32 have been added. Thus, claims 1-32 are now pending.

Rejections based on *You et al.*

In the Office Action, the Examiner has rejected claims 1, 12, 15 and 18 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 5,787,245 (*You et al.*) The Applicant respectfully reiterates the arguments submitted in previous amendments and respectfully submits that claims 1, 12, 15 and 18 are patentable over *You et al.*

Furthermore, it is respectfully submitted that claimed invention is patentable over *You et al.* for additional reasons. In the Office Action, the Examiner has asserted that *You et al.* teaches inputting a formal specification into a code generator which in turn parses the formal specification to generate a front-end debugger. In making this assertion, the Examiner seems to be considering the "client debugger object" to be both a code generator and a front-end debugger. (Office Action, page 6, lines 3-7) This, however, seems unreasonable because it requires the "client debugger object" to generate itself based on a formal specification. Clearly, the "client debugger object" cannot be considered to be both a code generator and a front-end debugger. In fact, it is respectfully submitted that as an object the "client debugger object" cannot be considered a parser in the context of the relevant art that parses a formal specification.

Again, it is noted that *You et al.* pertains to a portable service for debugging computer software programs. It is also noted that the services provide a framework consisting of a debugger server and a debugger client. (*You et al.*, Abstract). The portable debugging system of *You et al.* is composed of a client debugger object, a server object, and connection object that facilitates communication between the client debugger object and server object. However, it is earnestly believed that *You et al.* does not teach generating the connection object based on a specification. As such, *You et al.* cannot possibly teach parsing a formal specification to generate a front-end debugger and a back-end debugger in the context of the invention.

It should be noted that claim 20 recites several additional features that render it patentable over *You et al.* for additional reasons. These features, for example, include the formal specification defining a high level debugging communication protocol for

communication between the first and second virtual machines, the front-end debugger program corresponding to a platform independent programming language which provides a high level debugging interface which can be accessed by a debugger application operating on a first virtual machine, the back-end debugger program code portion implementing a virtual machine debugging interface which provides the capability to control and communicate with a second Virtual machine, and the back-end debugger program code portion corresponding to a platform-specific programming language.

Furthermore, it should be noted that claim 21 additionally recites providing a front-end processing module and a back-end processing module respectively for the front-end debugger program and the back-end debugger code portion. The front-end processing module and the back-end processing module implementing a transport mechanism for communication between the front-end debugger program and the back-end debugger code portion. There is no teaching in *You et al.* with respect to a front-end or back-end processing module in the context of the invention. These features render claim 21 patentable over *You et al.* for additional reasons. Other dependent claims, for example, claims 24 and 25, recite additional features associated with the operation of the front-end and back-end processing modules. Hence, these dependent claims are patentable over *You et al.* yet for additional reasons.

Still Further, claim 23, recites the additional features of the formal specification being: written in a purely declarative language, defining format of information and requests between the front-end debugger program and the back-end debugger code portion. However, the formal specification does not define the transport mechanism which is implemented for communication between the front-end debugger program and the back-end debugger code portion. It is respectfully submitted that the "PrimitiveConnection" disclosed by *You et al.* cannot be reasonably considered to teach all these features. As such, claim 23 is patentable over *You et al.* for these additional reasons.

Claim 1 pertains to a method for assuring compatibility between a formal specification, a front-end debugger program, and a back-end debugger program which interfaces with a debuggee system. As such, claim 1 recites inputting a formal specification into a code generator; parsing the formal specification; generating a front-end debugger program portion from the formal specification; and generating a back-end debugger program portion from the formal specification such that the front-end is

compatible with the debugger program. Accordingly, it is respectfully submitted that claim 1 is patentable over *You et al.* for at least the reasons discussed above. In addition, claims that are dependent on claim 1 are also patentable for at least these reasons. Moreover, these claims recite additional features which render them patentable for additional reasons.

Claim 12 also pertains to a method for automatically generating front-end debugger interface code and back-end debugger agent interface code that are both compatible with a communication protocol. As such, claim 12 and its dependent claims are also patentable over *You et al.* for at least the reasons discussed above with respect to claim 1.

Although independent claims 15 and 18 respectively pertain to a computer readable medium and a computer system, these claims recite similar features as the features recited in claim 1. Accordingly, it is respectfully submitted that claims 15 and 18 and claims that are dependent on them are also patentable over *You et al.* for at least the reasons discussed above with respect to claim 1.

Rejections based on 35 U.S.C. §112

The Applicant respectfully reiterates arguments submitted in previous amendments. Furthermore, it is respectfully submitted that use of trademark language in the claims does not automatically render a claim invalid per se. In this case, clearly, the use of Java as a known and defined programming language is permissible. Accordingly, all rejections should be withdrawn.

Rejections based on Presentations of Java one Conference

It is earnestly believed that the Examiner has made reference to material presented in Java two conference. Clarification is respectfully requested. Again, it is respectfully submitted that the material presented in Java one conference does not teach the claimed invention. Furthermore, it is respectfully submitted that that "Official Notices" taken by the Examiner are too vague and/or overly broad to constitute an Official Notice. For example, the Examiner has taken "Official Notice" that the specific procedures and data packet formats necessary for sending and receiving data for a protocol are necessary in order to be able to implement such. (Office Action, page 12). In any

case, the Applicant seasonably challenge the examiner and respectfully requests the Examiner to provide support for all Office Notices taken by the Examiner.

Summary

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Based on the foregoing, it is submitted that all pending claims are patentably distinct over the cited art of record. Additional limitations recited in the independent claims or the dependent claims are not further discussed as the above-discussed limitations are clearly sufficient to distinguish the claimed invention from the cited art. Accordingly, it is respectfully requested that the Examiner withdraw all the rejections.

Applicant believes that all pending claims are allowable and respectfully requests a Notice of Allowance for this application from the Examiner. Should the Examiner believe that a telephone conference would expedite the prosecution of this application, the undersigned can be reached at the telephone number set out below.

If there are any issues remaining which the Examiner believes could be resolved through either a Supplemental Response or an Examiner's Amendment, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for an extension of time which may be required to maintain the pendency of this case, and any required fee for such extension or any further fee required in connection with the filing of this Amendment is to be charged to Deposit Account No. 500388 (Order No. SUN1P252).

Respectfully submitted,
BEYER, WEAVER & THOMAS, LLP


R. Mahboubian
Reg. No. 44,890

P.O. Box 778
Berkeley, CA 94704-0778
(650) 961-8300